DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: STP-0004-00(456) Gwinnett
P.I. No.: 0004456
McGinnis Ferry Road Extension

OFFICE: Engineering Services

DATE: May 20, 2008

FROM: Brian K. Summers, PE, Project Review Engineer BKS

TO: Russell McMurry, P.E., District Engineer, Gainesville

SUBJECT: **IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES**

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/LCC	Implement	Comments
ALIGNMENT (A)				
A-1	Use right-in right-out at the intersection of Original Peachtree Road and proposed Northbrook Parkway in lieu of cul-de-sac.	Design Suggestion	No	This creates an operational and safety issue since this right-in right-out driveway would be very close to the intersection and would be located in the Right Turn Decel Lane.
TYPICAL SECTIONS (S)				
S-1	Use 11 ft. wide lanes everywhere in lieu of 12 ft.	$1,382,351	No	Gwinnett County is responsible for the Right of Way on this project which is almost half the cost savings. Some of the Right of Way has already been purchased. In addition, this will be the detour for the construction of the Lawrenceville-Suwanee Road widening project which will increase the number of trucks on

				this route.
ALT #	**Description**	**Potential Savings/LCC**	**Implement**	**Comments**
TYPICAL SECTIONS (S) - continued				
S-2	Use 11 ft. wide lanes only on the outside lanes of the section. All other lanes are 12 ft. wide.	$691,175	No	Gwinnett County is responsible for the Right of Way on this project which is almost half the cost savings. Some of the Right of Way has already been purchased. In addition, this will be the detour for the construction of the Lawrenceville-Suwanee Road widening project which will increase the number of trucks on this route.
S-3.1	Eliminate the retaining walls and purchase more right-of-way instead.	$80,493 (proposed) $165,000 (actual)	Yes	Wall No. 1 will now be eliminated. Wall No. 13 is located on a parcel where Right of Way acquisition has already begun.
S-4	On McGinnis Ferry Rd., eliminate the 6 ft. and 5 ft.-6 in. grass strip; move the 5 ft. concrete sidewalk and multi-use path next to the curb. Reduce Right of Way requirements.	$1,388,050	No	Right of Way acquisition has already been acquired through advanced acquisition through part of this parcel
S-5	Reduce the width of the grass strip from 6 ft. and 5 ft.-6 in. to 2 ft. on McGinnis Ferry Road. Reduce section from 104 ft. to 96.5 ft.	$905,250	No	Right of Way acquisition has already been acquired through advanced acquisition through part of this parcel

ALT #	Description	Potential Savings/LCC	Implement	Comments
TYPICAL SECTIONS (S) - continued				
S-6	Keep the shoulders but eliminate construction of the multiuse path and 5 ft. concrete sidewalk from all roads. Let the developers install the improvements later. No change in section width.	$1,236,750	No	There are several pedestrian generators on each side of the road along this corridor. In addition, this route ties to a section already finished which has a 10-ft. multiuse path on one side and a 5-ft. sidewalk on the other side.
S-7	Eliminate the 5 ft. concrete sidewalk from all roads, but keep the shoulders and multi-use path. No change in section width.	$508,950	No	There are several pedestrian generators on each side of the road along this corridor making the pedestrian connectivity necessary.
S-8	On McGinnis Ferry Rd, use an 18 ft. median in lieu of 20 ft. Reduce roadway section from 104 ft. to 102 ft.	$382,548	No	Gwinnett County is responsible for the Right of Way on this project which accounts for all the savings.
S-9	Reduce the pavement thickness on all roads except McGinnis. The section appears quite conservative.	$1,050,000	Yes	This should be done.
S-10	Use 24 in. curbs/gutters in lieu of 30 in. Reduce section width from 104 ft. to 102 ft.	$454,237	No	Almost $400,000 of the costs savings is associated with the Right of Way savings. The additional drainage structures and re-design costs would negate the rest of the costs savings.

ALT #	Description	Potential Savings/LCC	Implement	Comments
TYPICAL SECTIONS (S) - continued				
S-11	Review the unit price of concrete vs. asphalt for the multi-use path. $60/LF should be $20/LF (Estimate correction).	$400,000	Yes	This should be done.
S-12	On relocated Old Peachtree Road, reduce the grass strip width from 6 ft. to 2 ft.	$386,240	No	Gwinnett County is responsible for the Right of Way on this project which accounts for all the savings.
PROFILE (P)				
P-1	Lower the profile from Sta. 160+00 to Sta. 193+00 to reduce the quantity of borrow required.	$772,560	No	This is in an area where advanced acquisition of Right of Way has already occurred. In addition, a 48" Force Main has already been installed based on the proposed grades. Any modifications to the profile could impact the Water Main.
P-2	Lower the profile from Sta. 115+00 to Sta. 120+00 to reduce the amount of borrow required.	$69,626	No	About $50,000 of the savings is due to removing Wall No. 1 which was covered under VE Alternative No. S-3.1. Redesign costs would negate the rest of the cost savings.
P-3	Convert at grade section from Sta. 211+00 Sta. 214+00 to bridge and eliminate the Con/Span® culvert.	$259,582 (proposed) $330,000 (actual)	Yes	This should be done.

ALT #	Description	Potential Savings/LCC	Implement	Comments
PROFILE (P) - continued				
P-4	Lower the grade from Sta. 209+00 to Sta. 235+00 to reduce the amount of borrow required.	$293,324	No	A 48" Force Main has already been installed based on the proposed grades through the area noted. Any modifications to the profile could impact the Water Main.
STRUCTURES (ST)				
ST-1	Only build 4-lane bridge over I-85 in lieu of 8 lanes. Use phased approach, with no turning lanes in first phase.	$2,350,794	No	A final decision reached jointly by GDOT, FHWA, and Gwinnett County is to use a four span bridge (2 @ 123.5' and 2 @ 55'). The bridge width will remain at 188'-5".
ST-2	Build 6 lanes in lieu of 8 lanes on I-85 bridge (4 travel lanes + 2 turning lanes) in a phased approach.	$1,371,297	No	A final decision reached jointly by GDOT, FHWA, and Gwinnett County is to use a four span bridge (2 @ 123.5' and 2 @ 55'). The bridge width will remain at 188'-5".
ST-3	Use shorter spans on I-85, but same 425 ft. length of bridge. (101' +111.5' + 111.5' + 101'). This allows the use of 54 in. bulb tee PSC beams in lieu of Type III PSC beams and 74 in. bulb tee PSC beams. Improves vertical clearance.	-$282,354 (cost increase)	No	A final decision reached jointly by GDOT, FHWA, and Gwinnett County is to use a four span bridge (2 @ 123.5' and 2 @ 55'). The bridge width will remain at 188'-5".

ALT #	Description	Potential Savings/LCC	Implement	Comments
STRUCTURES (ST) - continued				
ST-4	Use 2-span bridge over I-85 with MSE wall abutments and phased approach. (121 ft. + 121 ft.)	$2,160,499	No	A final decision reached jointly by GDOT, FHWA, and Gwinnett County is to use a four span bridge (2 @ 123.5' and 2 @ 55'). The bridge width will remain at 188'-5".
ST-5	Use a phased approach on the I-85 bridge. Build a 144 ft. span now, remaining lanes in the future.	$3,497,801	No	A final decision reached jointly by GDOT, FHWA, and Gwinnett County is to use a four span bridge (2 @ 123.5' and 2 @ 55'). The bridge width will remain at 188'-5".
ST-6	Use a 6-lane bridge with shorter, but more uniform spans. (101'+111.5'+111.5' +101')	$1,525,232	No	A final decision reached jointly by GDOT, FHWA, and Gwinnett County is to use a four span bridge (2 @ 123.5' and 2 @ 55'). The bridge width will remain at 188'-5".

NOTE: The bridge configuration that was reached by a consensus of GDOT, FHWA and Gwinnett County personnel results in a cost savings of $770,395.

A meeting was held on March 18, 2008 and Ron Morris and Stephen Lindsey with PBS & J, Robert Mahoney with District 1 Preconstruction and Brian Summers, Ron Wishon and Lisa Myers of Engineering Services were in attendance.

Additional information was provided by the Project Manager on May 20, 2008.

The results above reflect the consensus of those in attendance and those who provided input.

Approved: Dale M R **Date:** 5/29/08

Gerald M. Ross, P. E., Chief Engineer

BKS/REW

Attachments

c: Gus Shanine, FHWA
Todd Long
James Magnus
Randall Davis
Robert Mahoney
Neil Kantner
Paul Liles
Bill Ingalsbe
Bill Duvall
Jennifer Rice
Christa Wilkinson
Ken Werho
Nabil M. Raad
Grant Waldrop
Tara Seabolt-Fox
Lisa Myers

Preconstruction Status Report By PI Number

Print Date: 05/21/2008

PROJ ID	COUNTY	DESCRIPTION	MGMT. ROW DATE	SCHED DATE	MGMT. LET DATE
0004456	Gwinnett	MCGINNIS FERRY RD EXT FM L'VILLE-SUWANEE TO SATELLITE BLVD	Apr-08	Oct-10	May-09

STP00-0004-00(456) *FIELD DIST:* 1
TIP #: GW-119 *TWIN:* *US:*
MPO: Atlanta TMA *EST DATE:* 3/26/2008
MODEL YR: 2010
PROJ MGR: Mahoney, Robert *PROJ LENGTH:* 2.67
PROG TYPE: New Construction *TYPE WORK:* Roadway Project
CONCEPT: ADD 4U(MED 20) *LET RESP:* LOC Congressional Districts: 7

Phase	Approved	Proposed	Cost	Fund	Status
PE	LOCL	LOCL	1,800,000.00	LOC	PRECST
ROW	LOCL	LOCL	16,642,000.00	LOC	PRECST
CST	2009	2008	20,559,792.00	L230S	PRECST
CST	2009	2008	362,208.00	EARMK	PRECST

SCHED START	SCHED FINISH	ACTIVITY	ACTUAL START	ACT/EST FINISH	PCT	DISTRICT COMMENTS
		Define Project Concept	11/1/2004	11/14/2004	100	VE STUDY 1-15-08 THRU
		Concept Meeting	10/22/2004	10/22/2004	100	1-18-08, PFPR SCHEDULED
		Concept Submittal and Review	10/23/2004	11/12/2004	100	2/21/08, PHOH SCHEDULED
		Receive Preconstruction Concept Approval	12/7/2004	1/4/2005	100	03/20/08 (RWM 2/8/08)
		Management Concept Approval Complete	**1/5/2005**	**3/1/2005**	**100**	
5/28/2008	6/3/2008	Value Engineering Study	10/19/2007		95	
		Public Information Open House Held	3/20/2008	3/20/2008	100	
11/7/2008	11/6/2008	Environmental Approval	4/27/2004		90	
		Public Hearing Held	3/20/2008	3/20/2008	100	
7/11/2008	7/31/2008	Mapping			0	
8/4/2008	9/5/2008	Field Surveys/SDE			0	
9/10/2008	**8/27/2009**	**Preliminary Plans**			0	
		Preliminary Bridge Design	1/29/2007	2/2/2007	100	
		Underground Storage Tanks	12/23/2003	1/15/2008	100	
		PFPR Inspection	2/21/2008	2/21/2008	100	
6/27/2008	9/18/2008	R/W Plans Preparation			0	
5/23/2008	**5/28/2008**	**R/W Plans Final Approval**	**4/3/2008**		**90**	
11/7/2008	11/11/2008	L & D Report Development and Approval			0	
5/29/2008	9/1/2010	R/W Acquisition			0	
2/16/2009	2/27/2009	Stake R/W			0	
		Soil Survey	7/13/2005	9/22/2005	100	
		Bridge Foundation Investigation	7/8/2005	9/23/2005	100	
11/12/2008	**9/15/2009**	**Final Design**			0	
12/11/2008	4/1/2009	Final Bridge Plans Preparation			0	
10/7/2009	10/8/2009	FFPR Inspection			0	
10/22/2009	11/4/2009	FFPR Response			0	

BIKE PROVISIONS INCLUDED?: N *MEASUREMENT SYSTEM:* E *CONSULTANT:* L *UT EST:*

PDD: NOV02 Bd App/Assig to Dist 1. 1/29/03. DOT will match Fed $ for CST per Coleman. 5/15/03. Will not make CST=05. 2/13/04.
Bridge: EJC 01/02/08
EIS: EA|Apvl1-15-08|NotOnSchRW|Updated5-15-08|Coley
LGPA: REV PMA SGN (L) GWINNETT DO PE|ROW & UTILITIES 9-10-04.
Planning: PE BY LOCAL
Traffic Op: CAH|D1 TO REVW LCL CNSLTNT PLNS|021203!PFPRsent2/11/08 W/R
Utility: GWINNETT COUNTY HANDLING
EMG: PE BY COUNTY

R/W INFORMATION:

PREL PARCEL CT: 30 *TOTAL PARCEL CT:* 66 *ACQUIRED BY:* LOC *ACQ MGR:* Byers, Kim (LOC)
UNDER-REVIEW CT: 1 *RELEASED CT:* 6 *OPT-PEND CT:* 0 *DEEDS CT:* 3 *COND-PEND CT:* 0 *COND-FILED CT:* 1
RW CERT DT: *ACQUIRED CT:* 4 *RELOCATION CT:* 0

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP00-0004-00(456) Gwinnett County
McGinnis Ferry Road Extension over I-85
PI # 0004456

OFFICE Gainesville

DATE May 20, 2008

FROM Robert W. Mahoney, P.E., District Preconstruction Engineer

TO Brian Summers, P.E. State Project Review Engineer
Attn: Lisa Myers

SUBJECT Value Engineering Study-Final Report Responses

Attached please find the responses to the Value Engineering Study conducted on January 15-18, 2008 for the above referenced project. Each comment and response was studied and addressed by both the Department's Project Manager and the Local Sponsor's Consultant Project Manager. The issues pertaining to the bridge length and width have finally been resolved between FHWA, GDOT and Gwinnett County. Our recommendations are attached.

Please let me know if you need additional information. I can be reached at 770-532-5520.

RWM

C: Project File
Attachments

McGINNIS FERRY ROAD EXTENSION OVER I-85
Project No. STP-0004-00(456) PI # 0004456
Gwinnett County
(Local Sponsor Project w/100% Local PE, R/W, &Utilities)

ALIGNMENT

Alternative A-1

Description: Use right-in right-out at the intersection of original Peachtree Road and proposed Northbrook Parkway in lieu of cul-de-sac.

Cost Savings: N/A-This was a design suggestion.

Response: Adding access at the intersection of original Old Peachtree Road and proposed Northbrook Parkway is not feasible due to the close proximity (approx. 300') to the new intersection of Old Peachtree and McGinnis Ferry. Relocated Old Peachtree Road and Northbrook Road tie in Station is 225+00. To tie in the proposed cul-de-sac end of the old alignment of Old Peachtree it would hit at approx. Station 232+00(+/- 700 feet from the relocated tie in point). Also at Station 235+00 (approx. 300') on Old Peachtree Road alignment, McGinnis Ferry Road intersects Old Peachtree Road.

The recommendation of District One Preconstruction is: Not to implement this request.

SECTION

Alternative S-1

Description: Use 11 ft wide lanes everywhere in lieu of 12 ft.

Cost Savings: $1,382,351

Response: The VE study team estimates a savings of $617K on construction and $765K for right of way. This equates to a total savings of $1.38 million. On this project Gwinnett County is responsible for right of way acquisition, so GDOT could only see the $617K construction savings. Additionally, Gwinnett County's design team estimates the actual construction cost savings would actually only be $500K. When coupled with an estimated $200K in re-design cost, this yields only $300K in cost savings. We feel the $300K in cost savings could easily be achieved by reducing the pavement section as suggested in S-9. (Currently we do not have an approved pavement design and are showing an over designed section that we believe will be reduced as we move forward with development of the project)

The current project schedule (ROW in FY 08) doesn't allow for a re-design of this magnitude and stay on the current schedule of Construction in FY 09. The layout would have to be re-done as would the drainage. Right of way acquisition and real property cost are the responsibility of Gwinnett County, the Local Sponsor for this project. Gwinnett County has acquired 5 parcels to date by Advance Acquisition due to threat of development in this corridor

Some additional reasons why we feel the additional cost for 12' lanes should be justified are as follows. When the widening of I-85 at SR 317 Lawrenceville/Suwanee Road occurs, the existing bridge over I-85 will have to be replaced. The McGinnis Ferry Road project will be the "detour route" for the planned bridge replacement component at SR 317. This will be the next closest crossing over I-85 to SR 317. This "detour route" will see significant traffic including substantial truck traffic. In the future, McGinnis Ferry Road bridge crossing over I-85 is proposed to become part of a split diamond interchange with the new bridge at SR 317, also resulting in additional truck traffic. . All approaches from existing McGinnis Ferry Road to this new alignment project currently are 12 foot wide lanes.

Pertaining to the Right of Way cost savings, at this point it is not possible for Gwinnett County to save the $765K estimated for right of way. The most significant reason is that several large parcels have

already been acquired by advanced acquisition as stated earlier. Reducing ROW for new acquisitions would result in an irregular ROW along McGinnis Ferry. Additionally, there are significant stretches of existing Burnett Road where existing right of way will be utilized for one side of the McGinnis Ferry Extension. In those areas, the reduction in right of way would only result in half of the savings because it would only be for one side of the road.

The recommendation of District One Preconstruction is: Not to implement this request due to items listed above.

Alternative S-2

Description: Use 11 ft wide lanes only on the outside lanes of the section. All other lanes are 12 ft wide.
Cost Savings: $691,175
Response: See response to S-1.

This comment has a similar response as comment S-1. The only difference being that of the $691K the VE Study team estimated could be saved, $382K is ROW savings which is Gwinnett County's responsibility. That leaves a construction savings of $309K. The design team estimates that the actual cost savings would be closer to $250K rather than the previously mentioned $309K. The plans would still have to be redesigned and the reasoning for leaving the lanes at 12' is the same as referenced in response to S-1.

The recommendation of District One Preconstruction is: Not to implement this request.

Alternative S-3.1

Description: Eliminate the retaining walls and purchase more ROW instead. Depending upon the location, additional ROW is less expensive.
Cost Savings: $80,493
Response: The ROW for this project is being funded by the County. We feel that the cost of the additional ROW would exceed the cost of the current retaining walls. Retaining walls are only proposed at locations where significant damages to parking lots, detention ponds, structures, industrial driveways or the Peachtree Road Baptist Church Cemetery would occur if slopes were used.
The wall that the VE Study team recommended eliminating was wall 13. This ROW for the parcel this wall is adjacent to has already been purchased, and the property has been developed. Any additional ROW required from this parcel could result in significant damages.

We believe that retaining wall #1 can be eliminated without additional ROW which should result in a cost savings of approximately $165K.

The recommendation of District One Preconstruction is: We are proposing to eliminate Wall # 1 at the beginning of the project with a reduced shoulder section w/ guardrail. This will allow us to tie in the proposed 2:1 slope just prior to the parking lot we were trying to not impact by utilizing a retaining wall.

Alternative S-4

Description: Eliminate the5'6" & 6'0" grass strip; move the 5' concrete sidewalk and multi-use path next to the curb. Reduce ROW requirements.
Cost Savings: $1,388,050
Response: The cost savings the VE Study team estimated for this change are entirely ROW savings which is Gwinnett County's responsibility. The current ROW was based on GDOT's requirements for clear zone and is consistent with the approved typical section. At wall #1, the shoulder is being reduced and

guardrail is being added in order to eliminate the wall. It can be done in this area because the affected parcel has no access to McGinnis Ferry. The County has already purchased the ROW in the other "no current access" areas. Other areas will have driveways and the desire is to keep the sidewalk offset constant. Gwinnett County is willing to incur this additional ROW cost.

The recommendation of District One – Preconstruction is: Not to implement this request.

Alternative S-5

Description: Reduce the width of the grass strip from 5'6" & 6'0" to 2 ft on McGinnis Ferry Road. Reduce section from 104 ft to 96.5 ft.
Cost Savings: $905,250
Response: See response to S-4

The recommendation of District One Preconstruction is: Not to implement this request.

Alternative S-6

Description: Keep the shoulders but eliminate construction of the multi-use path and 5 ft concrete sidewalk from all roads. Let the developers install the improvements later. No change in section width.
Cost Savings: $1,236,750
Response: The typical section including the sidewalk and the multi-use path were approved by the design team two years ago, and it is current GDOT policy to provide ADA accessible pedestrian facilities on both sides of the road. As the corridor continues to develop, pedestrian facilities will become increasingly important. The County feels that these amenities are important for pedestrian safety and enhance the value of the project for the taxpayers.

The County considered eliminating the sidewalk on McGinnis Ferry from Old Peachtree to Lawrenceville-Suwanee Rd., but feels that it is not worth the liability. The total cost for the entire sidewalk throughout the entire project is estimated to be $419,580. Therefore eliminating the sidewalk in this one area does not result in significant savings.

We are looking at reducing the pavement typical section on the multi-use path to reduce cost.

The recommendation of District One Preconstruction is: To not implement this request but look at reducing the typical section on the multi-use path to reduce cost.

Alternative S-7

Description: Eliminate the 5 ft concrete sidewalk from all roads but keep the shoulders and multi-use path. No change in section width.
Cost Savings: $508,950
Response: See S-6.

The recommendation of District One Preconstruction is: To not implement this request and install pedestrian facilities on both sides of the roadway where applicable, which will match our current urban typical section design guidelines. We will look at reducing the typical section on the multi-use path to reduce cost.

Alternative S-8

Description: Use an 18 ft median in lieu of 20 ft on McGinnis Ferry Road. Reduce roadway section from 104 ft to 102 ft.

Cost Savings: $382,548

Response: The current 20 ft. median has already been reduced from 24 ft. The current median is a compromise between FHWA, GDOT and Gwinnett County. Reducing the median further would result in a negative offset condition.

The only savings the VE team recognizes for this change is in right of way acquisition. Right of way is entirely Gwinnett County's responsibility, so none of this savings would be seen by GDOT. Additionally, reducing the median width would severely impact the schedule because plans would have to be almost entirely redesigned.

The recommendation of District One Preconstruction is: Not implement this request.

Alternative S-9

Description: Reduce the pavement thickness on all roads except McGinnis. The section appears quite conservative.

Cost Savings: N/A

Response: Final pavement thickness hasn't been established.

A final pavement design has not been prepared for this project. The pavement thicknesses shown on the typical sections were estimates because pavement design is not typically done until after the preliminary field plan review. After running some preliminary pavement designs, it is anticipated that the pavement designs submitted for approval will be significantly less than what is currently shown on the typical sections. Based on a GDOT standard pavement design of 5% under design, the pavement thickness will be 3" less than what is shown in the typical sections. This would result in a decrease in construction cost of approximately $1.05 million. The design team is exploring the possibility of going to a 10% under design which would allow us to reduce the pavement thickness by an additional inch. This would result in an additional savings of approximately $350K for a total reduction in construction cost of approximately $1.4 million.

The recommendation of District One Preconstruction is: Recommend reducing the pavement design typical section on this Local Sponsor project to 5% under design to reduce cost.

Alternative S-10

Description: Use 24 inch curbs/gutters in lieu of 30 inch. Reduce section width from 104 ft to 102 ft.

Cost Savings: $454,237

Response: The use of 24" curb and gutter would require significant re-design including more drainage structures. The re-design would result in significant negative impact to the schedule. The re-design would not result in any ROW savings (see S-4).

Of the $454K the VE team estimated could be saved by reducing the gutter width, $382K is ROW savings. The additional drainage structures would offset any cost savings in construction and right of way. Gwinnett County is funding the ROW (See S-4). The re-design would result in significant negative impact to the schedule. The 30" curb and gutter is per GDOT's design guidelines.

The recommendation of District One Preconstruction is: To not implement this request due to the increase in cost of adding additional drainage structures and the impact to project schedule for redesign as stated above.

Alternative S-11

Description: Review the unit price of concrete vs. asphalt path. $60/LF should be $20/LF (Estimate correction)

Cost Savings: $400,000

Response: The VE Study Team is correct that the unit price for the asphalt path should be $20/LF.

The recommendation of District One Preconstruction is: To implement this request and correct estimated cost of multi-use path.

Alternative S-12

Description: On Relocated Old Peachtree Road, reduce the grass strip width from 6 ft to 2 ft.
Cost Savings: $386,240
Response: Concur.

The recommendation of District One Preconstruction is: To implement this request.

PROFILE

Alternative P-1

Description: Lower the profile from STA 160+00 to STA 193+00 to reduce the quantity of borrow required.
Cost Savings: $772,560
Response: A portion of the proposed profile change appears feasible. The VE team recommends lowering the profile from station 160+00 to 193+00. The profile between Station 160+00 and Station 176+00 is already proposed to have a steep grade of 5.8%. The VE team's recommendation proposes to increase that profile grade to over 6.4%. This area is expected to have significant truck traffic and excessive grades can have serious impacts on operational performance and capacity. It is not recommended that this portion of the profile be modified.

Additionally, the Gwinnett County Department of Water Resources has installed a 48" force main along parts of the project based on the current profile. Additionally, the ROW on some advanced acquisition parcels has already closed and it would be difficult to request additional ROW in those areas.

The recommendation of District One Preconstruction is: Not to implement this request due to steepening the profile grade in this area and the impacts which would be caused to utilities that have already been installed based on the current profile grades. Also there would be significant renegotiations required on previously acquired right of way parcels.

Alternative P-2

Description: Lower the profile from STA 115+00 to STA 120+00 to reduce the amount of borrow required.
Cost Savings: $69,626
Response: See response to P-1.

The current profile was designed to minimize impacts to both sides of existing Burnett Road. It is a cut section on the north side of the road and a fill section on the south side. Lowering the profile would reduce the amount of fill slightly, but it would increase the impacts to the parcels on the north side of the road. Several of these parcels are under development and have coordinated their projects with the proposed McGinnis Ferry Extension. Revising the profile at this point would negatively impact property owners that have been proactive in coordinating their projects with the roadway project. Nearly $50K of the $70K the VE team estimated that could be saved at this location is a result of eliminating portions of the proposed retaining wall (wall #1). As discussed earlier in these responses, the design team has already determined a way to eliminate all of this retaining wall. The negative impact to the property owners in addition to the fact that the wall has already been eliminated, make it likely that the proposed plan change would cost more than the existing design.

The recommendation of District One Preconstruction is: Not to implement this request but move forward with eliminating wall # 1 to reduce cost through this section.

Alternative P-3

Description: Convert at grade section from STA 211+00 to STA 214+00 to bridge and eliminate the Conspan culvert.
Cost Savings: $259,582
Response: This change will be implemented. The County is working with the bridge engineer to come up with a bridge vs. Conspan cost comparison for the creek crossing on Northbrook Parkway. The bottomless culvert at this location is estimated to cost $3.13 million. A very conservative cost estimate for the bridge is $2.8 million. The County's design team is proceeding with design of the bridge.

The recommendation of District One Preconstruction is: To implement this request and reduce overall cost of this stream crossing by approx. $330,000.00.

Alternative P-4

Description: Lower the grade from STA 209+00 to STA 235+00 to reduce the amount of borrow required.
Cost Savings: $293,324
Response: Lowering the profile in this location would cause significant impacts to a recently designed and installed 48" force main. The force main was designed in coordination with the existing McGinnis Ferry plans. The $293K estimated savings in borrow would be outweighed by the relocation of the force main. In addition, some of the savings from reduction of borrow would not be realized because the bottomless culvert at this location is being changed to a bridge.

The recommendation of District One Preconstruction is: Not to implement this request due to rework of existing 48" force main. Proceed with reduction of cost in this area by utilizing a bridge structure vs. Conspan bottomless culvert.

STRUCTURES

Alternative ST-1

Description: Only build 4-lane bridge over I-85 in lieu of 8 lanes. Use phased approach, with no turning lanes in first phase.
Cost Savings: $2,350,794
Response: This bridge is part of a planned upgrade to I-85 in this area which includes collector/distributor lanes, HOV lanes and an overall commitment with FHWA to construct a split diamond interchange with SR 317. By building the current design it means I-85 will only have to be interrupted once and allows for the staging of future construction. Reducing costs now will result in significant cost increases in the future. This is the design that everyone (GCDOT, GDOT, FHWA) approved two years ago.

The recommendation of District One Preconstruction is: Please see attached minutes of teleconference with Preconstruction Division Director, GDOT Urban Design staff, District 1 staff and FHWA for current status and recommendations on this bridge over I-85. This bridge size, both length and width, is still being discussed by all listed above to determine what should be implemented. At this time, I will defer to Mr. Long and FHWA as to what our final recommendation will be on the bridge size.

The final decision by GDOT, FHWA and Gwinnett County is to reduce the mainline span lengths by 34' each side of I-85 mainline. The four span bridge will be (2) 123.5' mainline spans and (2) 55' end spans over I-85. Bridge width will remain as currently designed. Bridge length reduction will reduce bridge cost by $ 770,394.74. This is the recommendation of District 1.

Alternative ST-2

Description: Build 6-lanes in lieu of 8-lanes on I-85 bridge. (4 travel lanes + 2 turning lanes) in a phased approach.
Cost Savings: $1,371,297
Response: See response to ST-1

The recommendation of District One Preconstruction is: See recommendation on ST-1.

Alternative ST-3

Description: Use shorter spans on I-85, but same 425 ft length of bridge. (101'+111.5'+101'). This allows the use of 54" Bulb Tee PSC beams in lieu of Type III PSC beams and 74" Bulb Tee PSC beams. Improves vertical clearance.
Cost Savings: ($282,354)
Response: See response to ST-1.

The recommendation of District One – Preconstruction is: See recommendation on ST-1.

Alternative ST-4

Description: Use 2-span bridge over I-85 with MSE wall abutments and phased approach. (121'+121')
Cost Savings: $2,160,499
Response: See response to ST-1.

The recommendation of District One – Preconstruction is: See recommendation on ST-1.

Alternative ST-5

Description: Use a phased approach on the I-85 bridge. Build a 144 ft. span now, remaining lanes in the future.
Cost Savings: $3,497.801
Response: See response to ST-1.

The recommendation of District One – Preconstruction is: See recommendation on ST-1.

Alternative ST-6

Description: Use a 6-lane bridge with shorter, but more uniform spans. (101'+111.5'+111.5'+101')
Cost Savings: $1,525.232
Response: See response to ST-1.

The recommendation of District One Preconstruction is: See recommendation on ST-1.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP00-0004-00(456) Gwinnett County
McGinnis Ferry Road Extension over I-85
PI # 0004456

OFFICE Gainesville

DATE February 28, 2008

FROM Robert W. Mahoney, P.E., District Preconstruction Engineer

TO Brian Summers, P.E. State Project Review Engineer

SUBJECT Value Engineering Study-Final Report Responses

Attached please find the responses to the Value Engineering Study conducted on January 15-18, 2008 for the above referenced project. Each comment and response was studied and addressed by both the Department's Project Manager and the Local Sponsor's Consultant Project Manager.

Please let me know if you need additional information. I can be reached at 770-532-5520.

RWM

C: Project file
Attachments

McGINNIS FERRY ROAD EXTENSION OVER I-85
Project No. STP-0004-00(456) PI # 0004456
Gwinnett County
(Local Sponsor Project w/100% Local PE, R/W, &Utilities)

ALIGNMENT

Alternative A-1

Description: Use right-in right-out at the intersection of original Peachtree Road and proposed Northbrook Parkway in lieu of cul-de-sac.

Cost Savings: N/A-This was a design suggestion.

Response: Adding access at the intersection of original Old Peachtree Road and proposed Northbrook Parkway is not feasible due to the close proximity (approx. 300') to the new intersection of Old Peachtree and McGinnis Ferry. Relocated Old Peachtree Road and Northbrook Road tie in Station is 225+00. To tie in the proposed culdesac end of the old alignment of Old Peachtree it would hit at approx. Station 232+00(+/- 700 feet from the relocated tie in point). Also at Station 235+00 (approx. 300') on Old Peachtree Road alignment , McGinnis Ferry Road intersects Old Peachtree Road.

The recommendation of District One Preconstruction is: Not to implement this request.

SECTION

Alternative S-1

Description: Use 11 ft wide lanes everywhere in lieu of 12 ft.

Cost Savings: $1,382,351

Response: The VE study team estimates a savings of $617K on construction and $765K for right of way. This equates to a total savings of $1.38 million. On this project Gwinnett County is responsible for right of way acquisition, so GDOT could only see the $617K construction savings. Additionally, Gwinnett County's design team estimates the actual construction cost savings would actually only be $500K. When coupled with an estimated $200K in re-design cost, this yields only $300K in cost savings. We feel the $300K in cost savings could easily be achieved by reducing the pavement section as suggested in S-9. (Currently we do not have an approved pavement design and are showing an over designed section that we believe will be reduced as we move forward with development of the project)

The current project schedule (ROW in FY 08) doesn't allow for a re-design of this magnitude and stay on the current schedule of Construction in FY 09. The layout would have to be re-done as would the drainage. Right of way acquisition and real property cost are the responsibility of Gwinnett County, the Local Sponsor for this project. Gwinnett County has acquired 5 parcels to date by Advance Acquisition due to threat of development in this corridor

Some additional reasons why we feel the additional cost for 12' lanes should be justified are as follows. When the widening of I-85 at SR 317 Lawrenceville/Suwanee Road occurs, the existing bridge over I-85 will have to be replaced. The McGinnis Ferry Road project will be the "detour route" for the planned bridge replacement component at SR 317. This will be the next closest crossing over I-85 to SR 317. This "detour route" will see significant traffic including substantial truck traffic. In the future, McGinnis Ferry Road bridge crossing over I-85 is proposed to become part of a split diamond interchange with the new bridge at SR 317, also resulting in additional truck traffic. . All approaches from existing McGinnis Ferry Road to this new alignment project currently are 12 foot wide lanes.

Pertaining to the Right of Way cost savings, at this point it is not possible for Gwinnett County to save the $765K estimated for right of way. The most significant reason is that several large parcels have

already been acquired by advanced acquisition as stated earlier. Reducing ROW for new acquisitions would result in an irregular ROW along McGinnis Ferry. Additionally, there are significant stretches of existing Burnett Road where existing right of way will be utilized for one side of the McGinnis Ferry Extension. In those areas, the reduction in right of way would only result in half of the savings because it would only be for one side of the road.

The recommendation of District One Preconstruction is: Not to implement this request due to items listed above.

Alternative S-2

Description: Use 11 ft wide lanes only on the outside lanes of the section. All other lanes are 12 ft wide.
Cost Savings: $691,175
Response: See response to S-1.

This comment has a similar response as comment S-1. The only difference being that of the $691K the VE Study team estimated could be saved, $382K is ROW savings which is Gwinnett County's responsibility. That leaves a construction savings of $309K. The design team estimates that the actual cost savings would be closer to $250K rather than the previously mentioned $309K. The plans would still have to be redesigned and the reasoning for leaving the lanes at 12' is the same as referenced in response to S-1.

The recommendation of District One Preconstruction is: Not to implement this request.

Alternative S-3.1

Description: Eliminate the retaining walls and purchase more ROW instead. Depending upon the location, additional ROW is less expensive.
Cost Savings: $80,493
Response: The ROW for this project is being funded by the County. We feel that the cost of the additional ROW would exceed the cost of the current retaining walls. Retaining walls are only proposed at locations where significant damages to parking lots, detention ponds, structures, industrial driveways or the Peachtree Road Baptist Church Cemetery would occur if slopes were used.
The wall that the VE Study team recommended eliminating was wall 13. This ROW for the parcel this wall is adjacent to has already been purchased, and the property has been developed. Any additional ROW required from this parcel could result in significant damages.

We believe that retaining wall #1 can be eliminated without additional ROW which should result in a cost savings of approximately $165K.

The recommendation of District One Preconstruction is: We are proposing to eliminate Wall # 1 at the beginning of the project with a reduced shoulder section w/ guardrail. This will allow us to tie in the proposed 2:1 slope just prior to the parking lot we were trying to not impact by utilizing a retaining wall.

Alternative S-4

Description: Eliminate the5'6" & 6'0" grass strip; move the 5' concrete sidewalk and multi-use path next to the curb. Reduce ROW requirements.
Cost Savings: $1,388,050
Response: The cost savings the VE Study team estimated for this change are entirely ROW savings which is Gwinnett County's responsibility. The current ROW was based on GDOT's requirements for clear zone and is consistent with the approved typical section. At wall #1, the shoulder is being reduced and

guardrail is being added in order to eliminate the wall. It can be done in this area because the affected parcel has no access to McGinnis Ferry. The County has already purchased the ROW in the other "no current access" areas. Other areas will have driveways and the desire is to keep the sidewalk offset constant. Gwinnett County is willing to incur this additional ROW cost.

The recommendation of District One – Preconstruction is: Not to implement this request.

Alternative S-5

Description: Reduce the width of the grass strip from 5'6" & 6'0" to 2 ft on McGinnis Ferry Road. Reduce section from 104 ft to 96.5 ft.
Cost Savings: $905,250
Response: See response to S-4

The recommendation of District One Preconstruction is: Not to implement this request.

Alternative S-6

Description: Keep the shoulders but eliminate construction of the multi-use path and 5 ft concrete sidewalk from all roads. Let the developers install the improvements later. No change in section width.
Cost Savings: $1,236,750
Response: The typical section including the sidewalk and the multi-use path were approved by the design team two years ago, and it is current GDOT policy to provide ADA accessible pedestrian facilities on both sides of the road. As the corridor continues to develop, pedestrian facilities will become increasingly important. The County feels that these amenities are important for pedestrian safety and enhance the value of the project for the taxpayers.

The County considered eliminating the sidewalk on McGinnis Ferry from Old Peachtree to Lawrenceville-Suwanee Rd., but feels that it is not worth the liability. The total cost for the entire sidewalk throughout the entire project is estimated to be $419,580. Therefore eliminating the sidewalk in this one area does not result in significant savings.

We are looking at reducing the pavement typical section on the multi-use path to reduce cost.

The recommendation of District One Preconstruction is: To not implement this request but look at reducing the typical section on the multi-use path to reduce cost.

Alternative S-7

Description: Eliminate the 5 ft concrete sidewalk from all roads but keep the shoulders and multi-use path. No change in section width.
Cost Savings: $508,950
Response: See S-6.

The recommendation of District One Preconstruction is: To not implement this request and install pedestrian facilities on both sides of the roadway where applicable, which will match our current urban typical section design guidelines. We will look at reducing the typical section on the multi-use path to reduce cost.

Alternative S-8

Description: Use an 18 ft median in lieu of 20 ft on McGinnis Ferry Road. Reduce roadway section from 104 ft to 102 ft.

Cost Savings: $382,548

Response: The current 20 ft. median has already been reduced from 24 ft. The current median is a compromise between FHWA, GDOT and Gwinnett County. Reducing the median further would result in a negative offset condition.

The only savings the VE team recognizes for this change is in right of way acquisition. Right of way is entirely Gwinnett County's responsibility, so none of this savings would be seen by GDOT. Additionally, reducing the median width would severely impact the schedule because plans would have to be almost entirely redesigned.

The recommendation of District One Preconstruction is: Not implement this request.

Alternative S-9

Description: Reduce the pavement thickness on all roads except McGinnis. The section appears quite conservative.

Cost Savings: N/A

Response: Final pavement thickness hasn't been established.

A final pavement design has not been prepared for this project. The pavement thicknesses shown on the typical sections were estimates because pavement design is not typically done until after the preliminary field plan review. After running some preliminary pavement designs, it is anticipated that the pavement designs submitted for approval will be significantly less than what is currently shown on the typical sections. Based on a GDOT standard pavement design of 5% under design, the pavement thickness will be 3" less than what is shown in the typical sections. This would result in a decrease in construction cost of approximately $1.05 million. The design team is exploring the possibility of going to a 10% under design which would allow us to reduce the pavement thickness by an additional inch. This would result in an additional savings of approximately $350K for a total reduction in construction cost of approximately $1.4 million.

The recommendation of District One Preconstruction is: Recommend reducing the pavement design typical section on this Local Sponsor project to 5% under design to reduce cost.

Alternative S-10

Description: Use 24 inch curbs/gutters in lieu of 30 inch. Reduce section width from 104 ft to 102 ft.

Cost Savings: $454,237

Response: The use of 24" curb and gutter would require significant re-design including more drainage structures. The re-design would result in significant negative impact to the schedule. The re-design would not result in any ROW savings (see S-4).

Of the $454K the VE team estimated could be saved by reducing the gutter width, $382K is ROW savings. The additional drainage structures would offset any cost savings in construction and right of way. Gwinnett County is funding the ROW (See S-4). The re-design would result in significant negative impact to the schedule. The 30" curb and gutter is per GDOT's design guidelines.

The recommendation of District One Preconstruction is: To not implement this request due to the increase in cost of adding additional drainage structures and the impact to project schedule for redesign as stated above.

Alternative S-11

Description: Review the unit price of concrete vs. asphalt path. $60/LF should be $20/LF (Estimate correction)

Cost Savings: $400,000

Response: The VE Study Team is correct that the unit price for the asphalt path should be $20/LF.

The recommendation of District One Preconstruction is: To implement this request and correct estimated cost of multi-use path.

Alternative S-12

Description: On Relocated Old Peachtree Road, reduce the grass strip width from 6 ft to 2 ft.
Cost Savings: $386,240
Response: Concur.

The recommendation of District One Preconstruction is: To implement this request.

PROFILE

Alternative P-1

Description: Lower the profile from STA 160+00 to STA 193+00 to reduce the quantity of borrow required.
Cost Savings: $772,560
Response: A portion of the proposed profile change appears feasible. The VE team recommends lowering the profile from station 160+00 to 193+00. The profile between Station 160+00 and Station 176+00 is already proposed to have a steep grade of 5.8%. The VE team's recommendation proposes to increase that profile grade to over 6.4%. This area is expected to have significant truck traffic and excessive grades can have serious impacts on operational performance and capacity. It is not recommended that this portion of the profile be modified.

Additionally, the Gwinnett County Department of Water Resources has installed a 48" force main along parts of the project based on the current profile. Additionally, the ROW on some advanced acquisition parcels has already closed and it would be difficult to request additional ROW in those areas.

The recommendation of District One Preconstruction is: Not to implement this request due to steepening the profile grade in this area and the impacts which would be caused to utilities that have already been installed based on the current profile grades. Also there would be significant renegotiations required on previously acquired right of way parcels.

Alternative P-2

Description: Lower the profile from STA 115+00 to STA 120+00 to reduce the amount of borrow required.
Cost Savings: $69,626
Response: See response to P-1.

The current profile was designed to minimize impacts to both sides of existing Burnett Road. It is a cut section on the north side of the road and a fill section on the south side. Lowering the profile would reduce the amount of fill slightly, but it would increase the impacts to the parcels on the north side of the road. Several of these parcels are under development and have coordinated their projects with the proposed McGinnis Ferry Extension. Revising the profile at this point would negatively impact property owners that have been proactive in coordinating their projects with the roadway project. Nearly $50K of the $70K the VE team estimated that could be saved at this location is a result of eliminating portions of the proposed retaining wall (wall #1). As discussed earlier in these responses, the design team has already determined a way to eliminate all of this retaining wall. The negative impact to the property owners in addition to the fact that the wall has already been eliminated, make it likely that the proposed plan change would cost more than the existing design.

The recommendation of District One Preconstruction is: Not to implement this request but move forward with eliminating wall # 1 to reduce cost through this section.

Alternative P-3

Description: Convert at grade section from STA 211+00 to STA 214+00 to bridge and eliminate the Conspan culvert.
Cost Savings: $259,582
Response: This change will be implemented. The County is working with the bridge engineer to come up with a bridge vs. Conspan cost comparison for the creek crossing on Northbrook Parkway. The bottomless culvert at this location is estimated to cost $3.13 million. A very conservative cost estimate for the bridge is $2.8 million. The County's design team is proceeding with design of the bridge.

The recommendation of District One Preconstruction is: To implement this request and reduce overall cost of this stream crossing by approx. $330,000.00.

Alternative P-4

Description: Lower the grade from STA 209+00 to STA 235+00 to reduce the amount of borrow required.
Cost Savings: $293,324
Response: Lowering the profile in this location would cause significant impacts to a recently designed and installed 48" force main. The force main was designed in coordination with the existing McGinnis Ferry plans. The $293K estimated savings in borrow would be outweighed by the relocation of the force main. In addition, some of the savings from reduction of borrow would not be realized because the bottomless culvert at this location is being changed to a bridge.

The recommendation of District One Preconstruction is: Not to implement this request due to rework of existing 48" force main. Proceed with reduction of cost in this area by utilizing a bridge structure vs. Conspan bottomless culvert.

STRUCTURES

Alternative ST-1

Description: Only build 4-lane bridge over I-85 in lieu of 8 lanes. Use phased approach, with no turning lanes in first phase.
Cost Savings: $2,350,794
Response: This bridge is part of a planned upgrade to I-85 in this area which includes collector/distributor lanes, HOV lanes and an overall commitment with FHWA to construct a split diamond interchange with SR 317. By building the current design it means I-85 will only have to be interrupted once and allows for the staging of future construction. Reducing costs now will result in significant cost increases in the future. This is the design that everyone (GCDOT, GDOT, FHWA) approved two years ago.

The recommendation of District One Preconstruction is: Please see attached minutes of teleconference with Preconstruction Division Director, GDOT Urban Design staff, District 1 staff and FHWA for current status and recommendations on this bridge over I-85. This bridge size, both length and width, is still being discussed by all listed above to determine what should be implemented. At this time, I will defer to Mr. Long and FHWA as to what our final recommendation will be on the bridge size.

The only concern is not building all the width in the bridge at this time. It will necessitate taking lanes on mainline I-85 out of service when this bridge substructure work has to be completed in the future.

Alternative ST-2

Description: Build 6-lanes in lieu of 8-lanes on I-85 bridge. (4 travel lanes + 2 turning lanes) in a phased approach.
Cost Savings: $1,371,297
Response: See response to ST-1

The recommendation of District One Preconstruction is: See recommendation on ST-1.

Alternative ST-3

Description: Use shorter spans on I-85, but same 425 ft length of bridge. (101'+111.5'+101'). This allows the use of 54" Bulb Tee PSC beams in lieu of Type III PSC beams and 74" Bulb Tee PSC beams. Improves vertical clearance.
Cost Savings: ($282,354)
Response: See response to ST-1.

The recommendation of District One – Preconstruction is: See recommendation on ST-1.

Alternative ST-4

Description: Use 2-span bridge over I-85 with MSE wall abutments and phased approach. (121'+121')
Cost Savings: $2,160,499
Response: See response to ST-1.

The recommendation of District One – Preconstruction is: See recommendation on ST-1.

Alternative ST-5

Description: Use a phased approach on the I-85 bridge. Build a 144 ft. span now, remaining lanes in the future.
Cost Savings: $3,497.801
Response: See response to ST-1.

The recommendation of District One – Preconstruction is: See recommendation on ST-1.

Alternative ST-6

Description: Use a 6-lane bridge with shorter, but more uniform spans. (101'+111.5'+111.5'+101')
Cost Savings: $1,525.232
Response: See response to ST-1.

The recommendation of District One Preconstruction is: See recommendation on ST-1.

Project # STP00-0004-00(456) Gwinnett County-McGinnis Ferry Road Ext.-PI # 0004456
Project # BRST0-0998-00(001) Gwinnett County-SR 324 @ I-85-PI # 142285-

SR 324 & McGinnis Ferry Road Extension Bridges over I-85

Teleconference meeting notes

February 25, 2008

Attendees: Todd Long, GDOT Preconstruction Division Director
Ben Buchan, GDOT State Urban Design Engineer
Chuck Hasty, GDOT Asst. State Urban Design Engineer
Neal O'Brien, GDOT Urban Design Group Manager

Wayne Fedora, FHWA, Major Projects Engineer
George Merritt, FHWA, Transportation Engineer
Leon Kim, FHWA, Structural Engineer

Russell McMurry, GDOT, District Engineer
Robert W. Mahoney, GDOT Preconstruction Engineer

Teleconference was scheduled for 10:00 a.m. to discuss the above referenced bridge projects over I-85 corridor. Todd Long facilitated the teleconference with FHWA team who was present at meeting site and with GDOT District staff by phone. FHWA is concerned due to funding not being identified for many of the projects that required the planed length and widths of these two bridges.

The overall discussion is to look at both projects from the cost savings analysis standpoint by reducing overall length and/or width of these ultimate bridge designs. Previous direction had been to design for ultimate build out of I-85 corridor through this project corridors which would include future expansion for necessary SOV, HOV(managed lane), C-Ds, and possible TOT lanes.

At the request of GDOT Preconstruction Division Director, Todd Long and the FHWA, we have been asked to review the overall plan for both of these bridge crossings over I-85. We have been directed to review the bridge projects through a detailed cost saving type analysis including comparison to any additional costs in the future to lengthen bridges. The objectives are to scale back the overall project cost and to provide today's actual need and purpose for the projects. Listed below are specific areas on each project where we have been asked to analyze cost and provide a summary of actual savings which can be obtained.

- McGinnis Ferry Road Extension Bridge over I-85

    1. Shorten spans # 2 & # 3 over current I-85 mainline to 131.5 feet by eliminating 26 foot of "future lanes" on each side
    2. Eliminate Span # 1 only which did not preclude the possibility of a southbound C-D. This will reduce the bridge at this location to three spans.
    3. Design end bents to allow for walls in the future.

- SR 324 Bridge over I-85

    1. Construct only the center span of this bridge structure, +/- 176 feet. This would provide for current planned expansion of the mainline I-85 towards the median for a total of 3 lanes in each direction; 2 general purpose lanes and 1 managed lane.
    2. End Bents to be designed such that they are intermediate bents in the future. Temporary MSE walls will be required, temporary wire walls will need to be evaluated as well.
    3. Construct only enough width on new bridge structure to provide 4 lanes total, 2 in each direction with a 20 feet raised median to match existing typical section on SR 324 on each side of bridge replacement.

- FHWA requested an update on IJR's for SR 324, HOV exit, and Sugarloaf Connector

Teleconference meeting was adjourned at 12:05 p.m.